

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/002183

A. CLASSIFICATION OF SUBJECT MATTER: IPC⁷: F01K 27/00, F17D 1/04, F17C 7/00, F02C 1/02, C01B 3/02, C25B 1/00, H02K 7/00

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC⁷: F01K 27/00, F17D 1/04, F17C 7/00, F02C 1/02, C01B 3/02, C25B 1/00, H02K 7/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

Delphion and Canadian Patent Database; and search terms used: carrier, line, natural, gas, pipeline, energy, flow, converter, water, extractor, generator, electrolyser, pressure, hydrogen, turb*, turbo-expander, expander, pyrolysis, and let down.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
Y	CA 1,274,399 A1 (KRYOS ENERGY INC.) 25 September 1990 (25-09-1990) Abstract; figure 1; and claims 1 to 10	1 to 58
Y	US 6,196,021 B1 (WISSOLIK) 06 March 2001 (06-03-2001) Abstract; figures 1 to 6; and claims 1 to 21	1 to 51 and 54 to 58
Y	US 4,555,637 A (ACD INC.) 26 November 1985 (26-11-1985) Abstract; figures 1 and 2; and claims 1 to 9	1 to 51 and 54 to 58
Y	US 5,003,782 A (KUCERJA) 02 April 1991 (02-04-1991) Abstract; figures 1 to 3; and claims 1 to 3	1 to 51 and 54 to 58

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents :	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

31 March 2005 (31-03-2005)

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CA2004/002183

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